IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.   : 09/842,127
Applicant   : Reginald C. SHIVERICK et al.
Filed   : April 26, 2001
TC/A.U.   : 2172
Examiner   : Baoquoc N. To

Docket No.   : 2589-101
Customer No.   : 06449
Confirmation No. : 6542

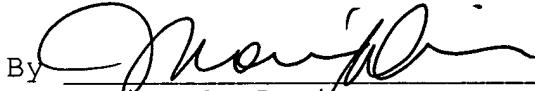## TRANSMITTAL OF APPEAL BRIEF

Mail Stop - Appeal Brief-Patents
Director of the United States Patent
 and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Enclosed in connection with the above-referenced application is an Appeal Brief with Appendix in triplicate. Please charge Deposit Account No. 02-2135 the amount of $165.00 as the fee for filing an Appeal Brief.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-2135. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

By _____
Monica S. Davis
Attorney for Applicants
Registration No. 44,492
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040

Enclosure(s): Orig & 2 copies of Appeal Brief
L:\2589\2589-101.APPBRF
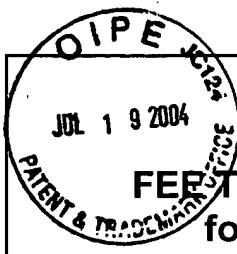
FEE TRANSMITTAL
for FY 2003
(Small Entity)

Complete if Known	
Application Number	09/842,127
Filing Date	April 26, 2001
First Named Inventor	Reginald C. SHIVERICK et al.
Examiner Name	Baoquoc N. To
Group Art Unit	2172

Total Amount of Payment	($) 165.00	Attorney Docket Number	2589-101

METHOD OF PAYMENT (check one)

1. [X] The Commissioner is hereby authorized to charge additional fees and credit any overpayment to Deposit Account Number 02-2135 in the name of Rothwell, Figg, Ernst & Manbeck

   [X] Charge any Additional Fee Required Under 37 CFR 1.16 and 1.17

   [ ] Applicant claims small entity status.

2. [ ] Payment Enclosed:
   [ ] Check
   [ ] Credit Card

FEE CALCULATION

1. FILING FEE

Fee Code	Fee $	Fee Description	Fee Paid
2001	385	Utility filing fee	[ ]
2002	170	Design Filing Fee	[ ]
2003	265	Plant Filing Fee	[ ]
2004	385	Reissue Filing Fee	[ ]
2005	80	Provisional Filing Fee	[ ]

SUBTOTAL $

2. CLAIMS

		Extra Claims		Fee		Fee Paid
Total Claims	[ ] - 20** =	[ ] x	$ 9 =	[ ]
Independent Claims	[ ] - 3** =	[ ] x	43 =	[ ]
Multiple Dependent Claims	+		145 =	[ ]

**or number previously paid, if greater;

SUBTOTAL $

FEE CALCULATION (continued)
3. ADDITIONAL FEES

Fee Code	Fee Paid	Fee Description	Fee Paid
2051	65	Surcharge - late filing fee or oath	[ ]
2052	25	Surcharge - late provisional filing fee or cover sheet	[ ]
1053	130	Non-English specification	[ ]
1812	2,520	For filing a request for reexamination	[ ]
1804	920	Requesting publication of SIR prior to Examiner action	[ ]
1805	1,840*	Requesting publication of SIR after Examiner action	[ ]
2251	55	Extension for reply within first month	[ ]
2252	210	Extension for reply within second month	[ ]
2253	475	Extension for reply within third month	[ ]
2254	740	Extension for reply within fourth month	[ ]
2255	1,005	Extension for reply within fifth month	[ ]
2401	165	Notice of Appeal	[ ]
2402	165	Filing a brief in support of an appeal	[$165]
2403	145	Request for Oral Hearing	[ ]
1451	1,510	Petition to institute a public use proceeding	[ ]
2452	55	Petition to revive -unavoidable	[ ]
2453	475	Petition to revive - unintentional	[ ]
2501	665	Utility issue fee (or reissue)	[ ]
2502	240	Design issue fee	[ ]
2503	320	Plant issue fee	[ ]
1460	130	Petitions to the Commissioner	[ ]
1807	50	Processing fee under 37 CFR 1.17(q)	[ ]
1806	180	Submission of Information Disclosure Statement	[ ]
8021	40	Recording each patent assignment per property (times number of properties)	[ ]
2809	385	Filing a submission after final rejection (37 CFR .129(a))	[ ]
2810	385	For each additional invention to be examined (37 CFR 1.129(b))	[ ]
2801	385	Request for Continued Examination (RCE)	[ ]
1802	900	Request for expedited examination of a design application	[ ]
1504	300	Publication fee for early, voluntary, or normal publication	[ ]
1505	300	Publication fee for republication	[ ]
1455	200	Filing an application for patent term adjustment	[ ]
1456	400	Request for reinstatement of term reduced	[ ]
		Other fee (specify)	[ ]

* Reduced by Basic Filing Fee Paid   SUBTOTAL $165.00

SUBMITTED BY		Complete (if applicable)	
NAME AND REG. NUMBER	Monica Davis, Reg. No. 44,492		
SIGNATURE	[signature]	DATE	July 19, 2004	DEPOSIT ACCOUNT	02-2135

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.	:	09/842,127
Applicant	:	Reginald C. SHIVERICK et al.
Filed	:	April 26, 2001
TC/A.U.	:	2172
Examiner	:	Baoquoc N. To
Docket No.	:	2589-101
Customer No.	:	06449
Confirmation No.	:	6542

MS Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

Sir:

The following comprises the Appellants' Brief on Appeal from the final rejection, dated February 17, 2004, of claims 1-48. This Appeal Brief is filed in triplicate and is accompanied by the required appeal fee set forth in 37 C.F.R. § 1.17(c). Appellants' Notice of Appeal was filed on May 17, 2004. Therefore, the present Appeal Brief is timely filed.

I.   REAL PARTY IN INTEREST

The real party in interest is the assignee of the present application, Dakota Software Corp. of Rochester, New York.

II.   RELATED APPEALS AND INTERFERENCES

Appellants state that, upon information and belief, they are not aware of any co-pending appeal or interference which will directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III.   STATUS OF CLAIMS

This is an appeal from the final rejection dated February 17, 2004, wherein claims 1-48 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bolnick et al. (U.S. Patent No. 5,838,317) ("Bolnick"). Claims 1-48 (see attached Appendix), as originally filed, are the claims currently on appeal.

IV.   STATUS OF AMENDMENTS

Claims 1-48 have not been amended. There have been no amendments filed after the final rejection.

V.   SUMMARY OF THE INVENTION

The invention will be summarized by reading the appealed claims onto the specification and drawings. See MPEP §1206, at 1200-10.

As recited in independent claim 1, one aspect of the invention is embodied in a computer-implemented information retrieval method, where retrieval results can be refined with iterations using data filters. The method involves generating a filtering query by specifying at least one query operator from selected data groupings of a filter tree table (Fig 2: step 218; paragraph 0032); running the filtering query against an unfiltered data table containing items of data (Fig 2: step 222; paragraph 0033); creating a filtered data table by receiving one or more data items filtered from the unfiltered data table in response to the filtering query and placing the received data items in the filtered data table (Fig 2: step 224; paragraph 0034); displaying data items in the filtered data table (Fig 2: step 226; paragraph 0035); displaying filter data in the filter tree table, with the filter data including selected data groupings (Fig 2: step 259; paragraph 0041); accepting a user input that selects or de-selects a data grouping to be filtered and displayed (Fig 2: step 269; paragraph 0042); and branching back to the generating step upon receipt of the user input (Fig 2: step 269; paragraph 0042).

As recited in dependent claim 2, the invention is further embodied in a method as described above which also comprises the steps of selecting one or more data sets (Fig 2: step 204; paragraph 0026); creating the unfiltered data table by receiving in the unfiltered data table a plurality of data items from the one or more data sets (Fig 2: step 206; paragraph 0027); displaying the plurality of data items of the unfiltered data table (Fig 2: step 210; paragraph 0028); and updating the filter tree table, with the filter tree table including selectable data groupings for the one or more data sets (Fig 2: step 213; paragraph 0029).

As recited in dependent claim 3, the invention is further embodied in a method as described above which also comprises the steps of generating a summary query from selected data groupings of the filter tree table (Fig 2: step 230; paragraph 0036); running the summary query against the filtered data table (Fig 2: step 235; paragraph 0037); generating a summary results comprising a data item count for each selected data grouping (Fig 2: step 251; paragraph 0038); and updating the filter tree table with the summary results (Fig 2: step 256; paragraph 0039).

As recited in dependent claim 4, the invention is further embodied in a method as described above which also comprises the step of generating a data item results in response to the summary query (Paragraphs 36, 40, 57 and 85).

As recited in dependent claim 5, the invention is further embodied in a method as described above which also comprises a preliminary step of selecting a data set (Fig 2: step 204; paragraph 0026).

As recited in dependent claim 6, the invention is further embodied in a method as described above in which the data set comprises a database (Paragraph 0027).

As recited in dependent claim 7, the invention is further embodied in a method as described above in which the data set comprises one or more data tables (Paragraph 0027).

As recited in dependent claim 8, the invention is further embodied in a method as described above in which a first filter level of the filter tree table corresponds to a column in the data set (Fig. 4: 411; paragraph 0062).

As recited in dependent claim 9, the invention is further embodied in a method as described above which also comprises the step of displaying a data item count for a particular data grouping (Fig. 4: 444; paragraphs 0036, 0066, 0068 and 0069).

As recited in dependent claim 10, the invention is further embodied in a method as described above which also comprises the step of displaying a data item count for a particular data grouping and updating all data item counts upon a data grouping selection or de-selection by the user (Fig. 4: 444; paragraphs 0036, 0066, 0068 and 0069).

As recited in dependent claim 11, the invention is further embodied in a method as described above in which all data groupings are automatically recalculated upon a selection or de-selection by the user (Paragraph 0040).

As recited in dependent claim 12, the invention is further embodied in a method as described above in which the generating a filtering query step includes creating the filtering query based on selected data groupings (Paragraph 0054).

As recited in dependent claim 13, the invention is further embodied in a method as described above in which the filtering query is a SQL query (Paragraph 0032).

As recited in dependent claim 14, the invention is further embodied in a method as described above in which accepting a user input includes a user clicking on a selection icon, with the selection icon corresponding to a predetermined data grouping (Fig. 5: 508; paragraphs 0045 and 0072).

As recited in independent claim 15, another aspect of the invention is embodied in a computer-implemented information retrieval method, where retrieval results can be refined with iterations using data filters. The method involves selecting one or more data sets (Fig 2: step 204; paragraph 0026); creating an unfiltered data table by

receiving in the unfiltered data table a plurality of data items from the one or more data sets (Fig 2: step 206; paragraph 0027); displaying the plurality of data items of the unfiltered data table (Fig 2: step 210; paragraph 0028); generating a filter tree table, with the filter tree table including selectable data groupings for the one or more data sets; generating a filtering query from selected data groupings of the filter tree table, with the filtering query comprising one or more query operators (Fig 2: step 218; paragraph 0032); running the filtering query against the unfiltered data table (Fig 2: step 222; paragraph 0033); creating a filtered data table by receiving in the filtered data table one or more data items filtered from the unfiltered data table in response to the filtering query (Fig 2: step 224; paragraph 0034); displaying data items in the filtered data table (Fig 2: step 226; paragraph 0035); generating a summary query from selected data groupings of the filter tree table (Fig 2: step 230; paragraph 0036); running the summary query against the filtered data table (Fig 2: step 235; paragraph 0037); generating a summary results comprising a data item count for each selected data grouping (Fig 2: step 251; paragraph 0038); updating the filter tree table with the summary results (Fig 2: step 256; paragraph 0039); displaying filter data in the filter tree table, with the filter data including selected data groupings and associated data item counts (Fig 2: step 259; paragraph 0041); accepting a user input that selects or de-selects a data grouping to be filtered and displayed (Fig 2: step 269; paragraph 0042); and branching back to the updating a filter tree table step upon receipt of a user input (Fig 2: step 269; paragraph 0042).

As recited in dependent claim 16, the invention is further embodied in a method as described above in which the data set comprises a database (Paragraph 0027).

As recited in dependent claim 17, the invention is further embodied in a method as described above in which the data set comprises one or more data tables (Paragraph 0027).

As recited in dependent claim 18, the invention is further embodied in a method as described above in which a first filter level of the filter tree table corresponds to a column in the data set (Fig. 4: 411; paragraph 0062).

As recited in dependent claim 19, the invention is further embodied in a method as described above in which data item counts are automatically updated upon a data grouping selection or de-selection by the user (Paragraph 0040).

As recited in dependent claim 20, the invention is further embodied in a method as described above in which all data groupings are automatically recalculated upon a selection or de-selection by the user (Paragraph 0040).

As recited in dependent claim 21, the invention is further embodied in a method as described above in which the generating a filtering query step includes creating the filtering query based on selected data groupings (Paragraph 0054).

As recited in dependent claim 22, the invention is further embodied in a method as described above in which the filtering query is a SQL query (Paragraph 0032).

As recited in dependent claim 23, the invention is further embodied in a method as described above in which accepting a user input includes a user clicking on a selection icon, with the selection icon corresponding to a predetermined data grouping (Fig. 5: 508; paragraphs 0045 and 0072).

As recited in dependent claim 24, the invention is further embodied in a method as described above in which the summary results further includes a data item results for the each selected data grouping (Paragraphs 36, 40, 57 and 85).

As recited in independent claim 25, another aspect of the invention is embodied in an information retrieval process, where retrieval results can be refined with iterations using data filters. The process involves providing a data set to an unfiltered data table (Fig 2: step 206; paragraph 0027); generating a filtering query by selecting one or more query operators and with the one or more query operators corresponding to selected data groupings in a filter tree table (Fig 2: step 218; paragraph 0032); running the

filtering query against the unfiltered data table (Fig 2: step 222; paragraph 0033); receiving one or more data items in a filtered data table, with the one or more data items being filtered from the unfiltered data table in response to the filtering query (Fig 2: step 224; paragraph 0034); displaying the one or more data items in the filtered data table (Fig 2: step 226; paragraph 0035); generating a summary query from selected data groupings in the filter tree table (Fig 2: step 230; paragraph 0036); running the summary query against the filtered data table to produce a summary result, with the summary result comprising a data item count for each selected data grouping (Fig 2: step 235; paragraph 0037); providing the summary result to the filter tree table (Fig 2: step 251; paragraph 0038); displaying the filter tree table (Fig 2: step 259; paragraph 0041); accepting a user input to the filter tree table, with the user input comprising a selection or de-selection of a data grouping (Fig 2: step 269; paragraph 0042); and branching back to the step of generating a filtering query upon receipt of a user input (Fig 2: step 269; paragraph 0042).

As recited in dependent claim 26, the invention is further embodied in a process as described above which also comprises the steps of selecting one or more data sets (Fig 2: step 204; paragraph 0026); creating the unfiltered data table by receiving in the unfiltered data table one or more data items from the one or more data sets (Fig 2: step 206; paragraph 0027); displaying the one or more data items of the unfiltered data table (Fig 2: step 210; paragraph 0028); and updating the filter tree table, with the filter tree table including selectable data groupings for the one or more data sets (Fig 2: step 213; paragraph 0029).

As recited in dependent claim 27, the invention is further embodied in a process as described above which also comprises the preliminary step of selecting a data set (Fig 2: step 204; paragraph 0026).

As recited in dependent claim 28, the invention is further embodied in a process as described above in which the data set comprises a database (Paragraph 0027).

As recited in dependent claim 29, the invention is further embodied in a process as described above in which the data set comprises one or more data tables (Paragraph 0027).

As recited in dependent claim 30, the invention is further embodied in a process as described above in which a first filter level of the filter tree table corresponds to a column in the data set (Fig. 4: 411; paragraph 0062).

As recited in dependent claim 31, the invention is further embodied in a process as described above in which data item counts are automatically updated upon a data grouping selection or de-selection by the user (Paragraph 0040).

As recited in dependent claim 32, the invention is further embodied in a process as described above in which all data groupings are automatically recalculated upon a selection or de-selection by the user (Paragraph 0040).

As recited in dependent claim 33, the invention is further embodied in a process as described above in which the generating a filtering query step includes creating the filtering query based on selected data groupings (Paragraph 0054).

As recited in dependent claim 34, the invention is further embodied in a process as described above in which the filtering query is a SQL query (Paragraph 0032).

As recited in dependent claim 35, the invention is further embodied in a process as described above in which accepting a user input includes a user clicking on a selection icon, with the selection icon corresponding to a predetermined data grouping (Fig. 5: 508; paragraphs 0045 and 0072).

As recited in dependent claim 36, the invention is further embodied in a process as described above in which the summary results further includes a data item results for the each selected data grouping (Paragraphs 36, 40, 57 and 85).

As recited in independent claim 37, another aspect of the invention is embodied in an information retrieval apparatus. The apparatus includes a processor (Fig. 7: 703; paragraphs 0076 and 0077); a user interface communicating with the processor and

Page 8 of 23

capable of interfacing with a user (Fig. 7: 710; paragraphs 0076, 0079 and 0080); an unfiltered data table communicating with the processor and capable of storing one or more data items (Fig 7: 717; paragraphs 0076, 0082 and 0083); a filtered data table communicating with the processor and capable of storing one or more filtered data items (Fig 7: 714; paragraphs 0076 and 0083); and a filter tree table communicating with the processor and capable of storing one or more selected data groupings (Fig 7: 728; paragraphs 0076, 0084-0086 and 0091). The processor receives user inputs from the user interface, controls a flow of data items into the unfiltered data table, generates at least one filtering query using selected data groupings in the filter tree table, runs the at least one filtering query against the unfiltered data table, fills the filtered data table with filtered data items from the unfiltered data table, displays the filtered data table, displays the filter tree table, and accepts user inputs to the filter tree table.

As recited in dependent claim 38, the invention is further embodied in an apparatus as described above in which the information retrieval apparatus comprises a data server accessible to clients in a client-server arrangement (Fig 3: 306; paragraph 0053).

As recited in dependent claim 39, the invention is further embodied in an apparatus as described above in which the information retrieval apparatus comprises a user computer that further includes input and output devices (Paragraph 0035).

As recited in dependent claim 40, the invention is further embodied in an apparatus as described above which also comprises a data source interface communicating with the processor and capable of receiving data from one or more external data sources (Fig. 7: 722; paragraphs 0076 and 0092).

As recited in dependent claim 41, the invention is further embodied in an apparatus as described above which also comprises a data source interface communicating with the processor and capable of receiving data from one or more external data sources, and wherein the data source interface is capable of translating

Page 9 of 23

received data items into a predetermined data format (Fig. 7: 722; paragraphs 0076 and 0092).

As recited in dependent claim 42, the invention is further embodied in an apparatus as described above which also comprises at least one internal data source communicating with the processor (Fig. 7: 722; paragraphs 0076 and 0092).

As recited in dependent claim 43, the invention is further embodied in an apparatus as described above in which the filter tree table is capable of storing data item counts corresponding to each data grouping (Paragraphs 0036 and 0039).

As recited in dependent claim 44, the invention is further embodied in an apparatus as described above in which the filter tree table is capable of storing data item results corresponding to each data grouping (Paragraphs 36, 57 and 85).

As recited in dependent claim 45, the invention is further embodied in an apparatus as described above in which the processor is capable of generating a display of one or more data items corresponding to selected data groupings in the filter tree table (Paragraphs 0031 and 0035).

As recited in dependent claim 46, the invention is further embodied in an apparatus as described above in which the processor is capable of generating a display of a parametric filter comprising data groupings stored in the filter tree table (Fig. 6: 405; paragraphs 0060 and 0061).

As recited in dependent claim 47, the invention is further embodied in an apparatus as described above in which the processor is capable of generating a display of a parametric filter comprising data groupings and data item counts stored in the filter tree table (Fig. 6: 405; paragraphs 0060 and 0061).

As recited in dependent claim 48, the invention is further embodied in an apparatus as described above in which the processor is capable of generating a display of a parametric filter comprising data groupings and data item results stored in the filter tree table (Fig. 6: 405; paragraphs 0060 and 0061).

VI.   ISSUES

Whether claims 1-48 are unpatentable under 35 U.S.C. §103(a) as being

obvious over Bolnick.

VII.   GROUPING OF CLAIMS

Claims 1-48 stand or fall together.

VIII.   ARGUMENTS

Claims 1-48 stand finally rejected under 35 U.S.C. §103(a) as being obvious

over Bolnick. See Non-Final Office Action at 2 (References are made to the non-final

rejection because the final rejection failed to repeat all grounds of rejection). The

rejection is improper and should be reversed for at least the following reasons.

First, independent claims 1, 15, 25 and 37 are distinguishable from Bolnick

because Bolnick does not disclose Appellants' "filter tree table" and "unfiltered data

table."[1] Further, the Patent Office merely speculates in hindsight that it would have

been obvious "to include the frames structure [sic] as the tree table in order to provide

the consistent [sic] of the data after [sic] filtering process." Id.

The Bolnick disclosure, in fact, teaches away from the present invention. The

Bolnick system and methodology specifically relates to arranging or displaying graphical

data. In Bolnick, a user is provided with access to a set of computer resources

associated with repositionable graphical representations displayed by the graphical

user interface. A display arrangement frame includes an area on the graphical user

interface, and a set of frame-specific arrangement rules having a frame filtering criterion

specifying at least one filtering property for limiting association of the computer

---

[1] The Patent Office admits that Bolnick does not disclose a filter tree table.
Non-Final Office Action at 3, third full paragraph; at 7, fourth full paragraph; at 10,
second full paragraph; and at 13, bridging paragraph.

resources with a frame. Frame filter properties for an indexed frame are applied to a currently indexed desktop item only after a set of desktop items in an image plane is enrolled to a set of frames of a layout associated with the image plane. See col. 26, line 63-col. 27, line 1.

The system and methodology claimed in this application, on the other hand, relates to retrieving information. The filter tree table of claims 1, 15, 25 and 37 reflects possible user selection choices in a parametric filter. The filter tree table is used to generate filtering queries that are sent to an unfiltered data table for retrieving information. These filtering queries are employed to filter the data contained in the unfiltered data table. See paragraph 0030 of the specification.

The Patent Office has not stated any reason why a person skilled in the art would be motivated to modify the system of Bolnick and no reason is suggested anywhere in the Bolnick reference. Thus, the proposed modification of Bolnick is no more than a hindsight reliance on the teachings in the present application of the advantages of the present invention.

Second, the Patent Office alleges that the "filter tree table" is not well defined in the claims and, hence, the filter tree table is just a _filter_ according to the broadest interpretation that is allowed. Final Office Action at 2, paragraph 2. This interpretation, however, is flawed.

Independent claim 1, for example, recites "generating a filtering query by specifying at least one query operator _from selected data groupings of a filter tree table_" (emphasis added). Independent claims 15, 25 and 37 have a similar limitation. Under the Patent Office's interpretation (_i.e._, a filter tree table is just a filter), the filtering query would be specified by selecting data groupings from a _filter_. However, a filter does not have data groupings. Hence, using the Patent Office's interpretation would render claim 1 nonsensical, and therefore, such interpretation does not fall within the broadest reasonable interpretation standard that is to be used during claim examination.

Page 12 of 23

Third, the Patent Office asserts that the "'unfiltered data table' is a set of desktop items of an image plane (col. 26, lines 63-65)." Id. This assertion is without merit.

The Patent Office incorrectly relies on the Bolnick disclosure to define a limitation of a claim of the present invention. To the contrary, claim language must be construed in light of the specification of the patent application to which it pertains. The unfiltered table of the present invention is not a set of desktop items, and the Patent Office cannot use the disclosure of Bolnick to define the terms of the claimed invention.

Accordingly, claims 1, 15, 25 and 37 cannot be rendered obvious over the Bolnick reference and, thus, Appellants respectfully request that the rejection of claims 1, 15, 25 and 37 be reversed.

Dependent claims 2-14, 16-24, 26-36 and 38-48 are allowable as being dependent from at least one of allowable base claims 1, 15, 25 and 37.

CONTINGENT AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT AND <u>CONTINGENT PETITION FOR EXTENSION OF TIME</u>

The present Brief on Appeal is being filed in triplicate. Unless a check is submitted herewith for the fee required under 37 C.F.R. §1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 02-2135.

Appellants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 02-2135.

Respectfully submitted,

Vincent M. DeLuca
Registration No. 32,408

Monica S. Davis
Registration No. 44,492

ROTHWELL, FIGG, ERNEST &
MANBECK, p.c.
1425 K Street, N.W.
Suite 800
Washington, D.C. 20005
Telephone: (202) 783-6040
Facsimile: (202) 783-6031

Date: July 19, 2004

APPENDIX

CLAIMS 1-48:

1. A computer-implemented information retrieval method, comprising the steps of:

generating a filtering query by specifying at least one query operator from selected data groupings of a filter tree table;

running said filtering query against an unfiltered data table containing items of data;

creating a filtered data table by receiving one or more data items filtered from said unfiltered data table in response to said filtering query and placing said received data items in said filtered data table;

displaying data items in said filtered data table;

displaying filter data in said filter tree table, with said filter data including selected data groupings;

accepting a user input that selects or de-selects a data grouping to be filtered and displayed; and

branching back to the generating step upon receipt of said user input.

2. The method of claim 1, further comprising the steps of:

selecting one or more data sets;

creating said unfiltered data table by receiving in said unfiltered data table a plurality of data items from said one or more data sets;

displaying said plurality of data items of said unfiltered data table; and

updating said filter tree table, with said filter tree table including selectable data groupings for said one or more data sets.

3. The method of claim 1, further comprising the steps of:

generating a summary query from selected data groupings of said filter tree table;

running said summary query against said filtered data table;

generating a summary result comprising a data item count for each selected data grouping; and

updating said filter tree table with said summary results.

4. The method of claim 1, further comprising the step of generating one or more data item results in response to said summary query.

5. The method of claim 1, further including a preliminary step of selecting a data set.

6. The method of claim 1, wherein said data set comprises a database.

7. The method of claim 1, wherein said data set comprises one or more data tables.

8. The method of claim 1, wherein a first filter level of said filter tree table corresponds to a column in said data set.

9. The method of claim 1, further including the step of displaying a data item count for a particular data grouping.

10. The method of claim 1, further including the step of displaying a data item count for a particular data grouping and updating all data item counts upon a data grouping selection or de-selection by said user.

11. The method of claim 1, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

12. The method of claim 1, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

13. The method of claim 1, wherein said filtering query is a SQL query.

14. The method of claim 1, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

15. A computer-implemented information retrieval method, comprising the steps of:

selecting one or more data sets;

creating an unfiltered data table by receiving in said unfiltered data table a plurality of data items from said one or more data sets;

displaying said plurality of data items of said unfiltered data table;

generating a filter tree table, with said filter tree table including selectable data groupings for said one or more data sets;

generating a filtering query from selected data groupings of said filter tree table, with said filtering query comprising one or more query operators;

running said filtering query against said unfiltered data table;

creating a filtered data table by receiving in said filtered data table one or more data items filtered from said unfiltered data table in response to said filtering query;

displaying data items in said filtered data table;

generating a summary query from selected data groupings of said filter tree

table;

running said summary query against said filtered data table;

generating a summary result comprising a data item count for each selected data grouping;

updating said filter tree table with said summary results;

displaying filter data in said filter tree table, with said filter data including selected data groupings and associated data item counts;

accepting a user input that selects or de-selects a data grouping to be filtered and displayed; and

branching back to said updating a filter tree table step upon receipt of a user input.

16. The method of claim 15, wherein said data set comprises a database.

17. The method of claim 15, wherein said data set comprises one or more data tables.

18. The method of claim 15, wherein a first filter level of said filter tree table corresponds to a column in said data set.

19. The method of claim 15, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

20. The method of claim 15, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

21. The method of claim 15, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

22. The method of claim 15, wherein said filtering query is a SQL query.

23. The method of claim 15, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

24. The method of claim 15, wherein said summary result further includes a data item result for said each selected data grouping.

25. An information retrieval process, comprising the steps of:

providing a data set to an unfiltered data table;

generating a filtering query by selecting one or more query operators and with said one or more query operators corresponding to selected data groupings in a filter tree table;

running said filtering query against said unfiltered data table;

receiving one or more data items in a filtered data table, with said one or more data items being filtered from said unfiltered data table in response to said filtering query;

displaying said one or more data items in said filtered data table;

generating a summary query from selected data groupings in said filter tree table;

running said summary query against said filtered data table to produce a summary result, with said summary result comprising a data item count for each selected data grouping;

providing said summary result to said filter tree table;

displaying said filter tree table;

accepting a user input to said filter tree table, with said user input comprising a selection or de-selection of a data grouping; and

branching back to the step of generating a filtering query upon receipt of a user input.

26. The information retrieval process of claim 25, further comprising the steps of:

selecting one or more data sets;

creating said unfiltered data table by receiving in said unfiltered data table one or more data items from said one or more data sets;

displaying said one or more data items of said unfiltered data table; and

updating said filter tree table, with said filter tree table including selectable data groupings for said one or more data sets.

27. The information retrieval process of claim 25, further including a preliminary step of selecting a data set.

28. The information retrieval process of claim 25, wherein said data set comprises a database.

29. The information retrieval process of claim 25, wherein said data set comprises one or more data tables.

30. The information retrieval process of claim 25, wherein a first filter level of said filter tree table corresponds to a column in said data set.

31. The information retrieval process of claim 25, wherein data item counts are automatically updated upon a data grouping selection or de-selection by said user.

32. The information retrieval process of claim 25, wherein all data groupings are automatically recalculated upon a selection or de-selection by said user.

33. The information retrieval process of claim 25, wherein said generating a filtering query step includes creating said filtering query based on selected data groupings.

34. The information retrieval process of claim 25, wherein said filtering query is a SQL query.

35. The information retrieval process of claim 25, wherein said accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping.

36. The information retrieval process of claim 25, wherein said summary result further includes a data item result for said each selected data grouping.

37. An information retrieval apparatus, comprising:
a processor;
a user interface communicating with said processor and capable of interfacing with a user;

an unfiltered data table communicating with said processor and capable of storing one or more data items;

a filtered data table communicating with said processor and capable of storing one or more filtered data items;

a filter tree table communicating with said processor and capable of storing one or more selected data groupings;

wherein said processor receives user inputs from said user interface, controls a flow of data items into said unfiltered data table, generates at least one filtering query using selected data groupings in said filter tree table, runs said at least one filtering query against said unfiltered data table, fills said filtered data table with filtered data items from said unfiltered data table, displays said filtered data table, displays said filter tree table, accepts user inputs to said filter tree table, and generates a filtering query upon receipt of a user input.

38. The apparatus of claim 37, wherein said information retrieval apparatus comprises a data server accessible to clients in a client-server arrangement.

39. The apparatus of claim 37, wherein said information retrieval apparatus comprises a user computer that further includes input and output devices.

40. The apparatus of claim 37, further comprising a data source interface communicating with said processor and capable of receiving data from one or more external data sources.

41. The apparatus of claim 37, further comprising a data source interface communicating with said processor and capable of receiving data from one or more external data sources, and wherein said data source interface is capable of translating received data items into a predetermined data format.

42. The apparatus of claim 37, further comprising at least one internal data source communicating with said processor.

43. The apparatus of claim 37, wherein said filter tree table is capable of storing data item counts corresponding to each data grouping.

44. The apparatus of claim 37, wherein said filter tree table is capable of storing data item results corresponding to each data grouping.

45. The apparatus of claim 37, wherein said processor is capable of generating a display of one or more data items corresponding to selected data groupings in said filter tree table.

46. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings stored in said filter tree table.

47. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings and data item counts stored in said filter tree table.

48. The apparatus of claim 37, wherein said processor is capable of generating a display of a parametric filter comprising data groupings and data item results stored in said filter tree table.